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PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

51

Application Number

09/524,590

Filing Date

March 14, 2000

First Named Inventor

Philip R. Krause

Art Unit

2176

Examiner Name

Chau T. Nguyen

Attorney Docket Number

### ENCLOSURES (Check all that apply)



Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)



Reply to Missing Parts/  
Incomplete Application



Reply to Missing Parts  
under 37 CFR 1.52 or 1.53



Drawing(s)



Licensing-related Papers



Petition



Petition to Convert to a  
Provisional Application



Power of Attorney, Revocation



Change of Correspondence Address



Terminal Disclaimer



Request for Refund



CD, Number of CD(s) \_\_\_\_\_

☐ Landscape Table on CD



After Allowance Communication to TC



Appeal Communication to Board  
of Appeals and Interferences



Appeal Communication to TC  
(Appeal Notice, Brief, Reply Brief)



Proprietary Information



Status Letter



Other Enclosure(s) (please identify  
below):

Remarks

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

Signature

Philip R. Krause

Printed name

Philip R. Krause

Date

May. 3, 2005

Reg. No.

### CERTIFICATE OF TRANSMISSION/MAILING

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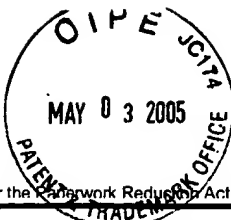
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Date

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/17 (12-04v2)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.  
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).**FEE TRANSMITTAL**  
**For FY 2005**☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) \$250.00

**Complete if Known**

|                      |                  |
|----------------------|------------------|
| Application Number   | 09/524,590       |
| Filing Date          | March 14, 2000   |
| First Named Inventor | Philip R. Krause |
| Examiner Name        | Chau T. Nguyen   |
| Art Unit             | 2176             |
| Attorney Docket No.  |                  |

**METHOD OF PAYMENT** (check all that apply)☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_☐ Deposit Account Deposit Account Number: \_\_\_\_\_ Deposit Account Name: \_\_\_\_\_

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**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

| Application Type | FILING FEES |                       | SEARCH FEES |                       | EXAMINATION FEES |                       | Fees Paid (\$) |
|------------------|-------------|-----------------------|-------------|-----------------------|------------------|-----------------------|----------------|
|                  | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)    | Small Entity Fee (\$) | Fee (\$)         | Small Entity Fee (\$) |                |
| Utility          | 300         | 150                   | 500         | 250                   | 200              | 100                   |                |
| Design           | 200         | 100                   | 100         | 50                    | 130              | 65                    |                |
| Plant            | 200         | 100                   | 300         | 150                   | 160              | 80                    |                |
| Reissue          | 300         | 150                   | 500         | 250                   | 600              | 300                   |                |
| Provisional      | 200         | 100                   | 0           | 0                     | 0                | 0                     |                |

**2. EXCESS CLAIM FEES****Fee Description**

Each claim over 20 (including Reissues)

| Fee (\$) | Small Entity Fee (\$) |
|----------|-----------------------|
| 50       | 25                    |
| 200      | 100                   |
| 360      | 180                   |

Each independent claim over 3 (including Reissues)

Multiple dependent claims

| Total Claims | Extra Claims | Fee (\$) | Fee Paid (\$) |
|--------------|--------------|----------|---------------|
|--------------|--------------|----------|---------------|

- 20 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of total claims paid for, if greater than 20.

| Indep. Claims | Extra Claims | Fee (\$) | Fee Paid (\$) |
|---------------|--------------|----------|---------------|
|---------------|--------------|----------|---------------|

- 3 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of independent claims paid for, if greater than 3.

**Multiple Dependent Claims**

| Fee (\$) | Fee Paid (\$) |
|----------|---------------|
|----------|---------------|

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof | Fee (\$) | Fee Paid (\$) |
|--------------|--------------|--|----------|---------------|
|--------------|--------------|--|----------|---------------|

- 100 = \_\_\_\_\_ / 50 = \_\_\_\_\_ (round up to a whole number) x \_\_\_\_\_ = \_\_\_\_\_

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): 2402 Filing a brief in support of an appeal, small entity \$250.00

**SUBMITTED BY**

|                   |                         |                                      |                        |
|-------------------|-------------------------|--------------------------------------|------------------------|
| Signature         | <i>Philip R. Krause</i> | Registration No.<br>(Attorney/Agent) | Telephone 301-365-8555 |
| Name (Print/Type) | Philip R. Krause        |                                      | Date May 3, 2005       |

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**In the United States Patent and Trademark Office**

Appn. Number: 09/524,590  
Appn. Filed: March 14, 2000  
Applicant: Philip R. Krause  
Customer No: 35197  
Title: Method and Apparatus for Enhancing Electronic Reading by  
Identifying Relationships Between Sections of Electronic  
Text  
Examiner/GAU: Chau T. Nguyen/2176  
Date: May 3, 2005

**Appeal Brief**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

The attached appeal brief is submitted, together with the appropriate appeal fee,  
pursuant to 37 CFR 41.37. The corresponding notice of appeal was filed on  
March 3, 2005.

05/04/2005 SZEWDIE1 00000054 09524590

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## **APPEAL BRIEF**

As an applicant not represented by a registered practitioner [37 CFR 41.37(c)(1)], the appellant pro se understands that this brief is required only to substantially comply with the requirements of 37 CFR 41.37(c)(1)(i)-(iv) and (c)(1)(vii)-(x) [MPEP 1206]. In this brief, the appellant will attempt to address all of the items (i) through (x), with the understanding that the critical components required for acceptance of this brief are items (i)-(iv) and (vii)-(x).

### **(i) Real party in interest.**

The real party in interest is the appellant pro se, Philip R. Krause.

### **(ii) Related appeals and interferences.**

To the knowledge of the appellant pro se, there are no related appeals or interferences.

### **(iii) Status of claims.**

Claims 1-35 were cancelled in the amendment of April 30, 2004, in which claims 36-69 were filed. Claims 36-69 were finally rejected in an office action mailed December 3, 2004. A response to the final rejection was submitted on February 3, 2004, and an advisory action indicating continued rejection of these claims was mailed on February 11, 2005. Thus, claims 36-69 are pending, and the rejection of claims 36-69 is appealed.

### **(iv) Status of amendments.**

No amendments were submitted or filed subsequent to the final rejection.

### **(v) Summary of claimed subject matter**

The **claimed invention** is a method for using a computer system, in response to a reader's request for display of electronic text, to automatically identify and provide additional reading material related to concepts referred to within said electronic text comprising, in sequence, the steps of:

a) accessing, using the reader's computer, electronic text requested for display by the reader, said electronic text containing at least one text section;

b) using said at least one text section to automatically formulate, on the reader's computer, a search request related to a concept referred to in said at least one text section;

c) responsive to said search request, automatically searching an index, wherein

i) said index contains a plurality of terms by which it may be searched;

ii) substantially all terms in said index are associated with at least one pointer to a text section; and

iii) at least one term in said index is associated with a plurality of pointers, at least two of said plurality of pointers pointing to different text sections;

d) responsive to step (c), automatically identifying additional reading material related to said concept; and

e) automatically displaying on said reader's computer display, an indicator of said additional reading material together with at least one link to a source of said additional reading material, side-by-side with a portion of the electronic text referred to in step (a).

The invention is well-described by the specification and the claims on appeal. While the original specification discloses multiple embodiments described by the claims, the basic invention of independent claim 36 (and independent system and device claims 68 and 69) is described on page 11 (lines 14-23) with reference to Figure 2. Step (a) is described on page 11, lines 16-18. Additional detail regarding steps (b) and (c) (page 11, lines 18-19) is provided in the context of an “implied search” (see, for example, page 6, lines 5-9, page 13, lines 17-20, and original claim 33) of an index (see page 12, lines 4-21, page 14, lines 1-10, and page 15, lines 12-22). Steps (d) (page 11, lines 19-21) and (e) (page 11, lines 21-23) are also illustrated by the results shown in Figs. 3-6.

The following chart shows locations in the specification where additional limitations associated with the dependent claims are described:

| CLAIM | DISCLOSURE                                     |
|-------|--|
| 37    | p. 15, lines 5-7; p. 20m lines 3-5             |
| 38    | p. 15, lines 5-7; p. 20m lines 3-5             |
| 39    | Figs. 3-4 and descriptions                     |
| 40    | Figs. 3-4 and descriptions; page 16, lines 5-8 |
| 41    | Page 16, line 1-page 17, line 16               |
| 42    | Page 16, lines 11-17                           |
| 43    | Page 16, lines 19-21                           |
| 44    | Page 17, lines 3-4                             |
| 45    | Page 16, line 24-page 17, line 3               |
| 46    | Page 12, lines 10-19                           |

|    |  |
|----|--|
| 47 | Page 16, lines 3-5                                       |
| 48 | Figs. 3 and 4 and descriptions                           |
| 49 | Page 16, lines 5-17                                      |
| 50 | Page 16, lines 17-19                                     |
| 51 | Page 17, lines 17-21                                     |
| 52 | Page 17, lines 17-21                                     |
| 53 | Page 17, lines 17-21                                     |
| 54 | Page 17, lines 17-21                                     |
| 55 | Page 12, lines 10-21                                     |
| 56 | Page 15, lines 14-22                                     |
| 57 | Page 15, lines 16-19 and Page 20, lines 3-7              |
| 58 | Page 15, lines 16-19 and Page 20, lines 3-7              |
| 59 | Page 20, lines 12-18                                     |
| 60 | Page 18, lines 9-17                                      |
| 61 | Figs 3 and 4, and descriptions                           |
| 62 | Page 17, line 22-page 18, line 7                         |
| 63 | Page 17, lines 8-10 and page 17, line 22-page 18, line 7 |
| 64 | Page 18, line 20-page 20, line 2                         |
| 65 | Page 17, line 22-page 18 line 5                          |
| 66 | Page 17, line 22-page 18 line 5                          |
| 67 | Page 15, lines 5-7                                       |

### **(vi) Grounds of rejection to be reviewed on appeal**

Claims 36-41, 43-69 are rejected under 35 U.S.C. 103 over Sotomayor in view of Meske.

Claim 42 is rejected under 35 U.S.C. 103 over Sotomayor in view of Meske and Boguraev.

### **(vii) Argument**

After summarizing the references cited in the final rejection, the arguments related to each of the claim rejections are made.

#### ***Summary of the references cited in the final rejection.***

Prior to presenting the appellant's argument, appellant will first discuss the references relied upon by the PTO in the final rejection of claims 36-69, based on combinations of Sotomayor and Meske and of claim 42 additionally on Boguraev.

**Sotomayor** (U.S. patent number 5,708,825) discloses a method for generating a summary page (or index) from one or more documents that are pre-selected by a user, such that significant key topics within the documents are linked to from the summary page. In addition, hyperlinks either to the summary page or to other documents indexed in this manner may be embedded in the text

of each of these documents, and each of these documents may be displayed to a user.

Sotomayor's method 1) is restricted to a pre-defined set of documents that are simultaneously indexed in order to identify common topics, 2) does not at any time search an index in the context of a request for display of text, and does not suggest the desirability of searching an index in this context, and 3) does not present indicators of additional reading material side-by-side with text originally requested for display, instead modifying the original text by embedding hyperlinks that lead to an index or to another document.

**Meske** (U.S. patent number 5,530,852) discloses a computer-implemented method and system for retrieving information. Meske provides a method by which articles may be indexed and stored in a computer file system. According to Meske's method, the articles are provided to a computer system, formatted as input mark-up language-containing files that describe the information to be retrieved (the first, second, and third files), and are stored for later retrieval based on this indexing by "profile" (i.e., source) or "topic". The system also saves the information in brief (the fourth file) or in complete (the fifth file) form. The specification indicates that articles may also be retrieved from this system in response to a specific user request from within a browser (column 2, line 64-65, Fig. 4, #440, column 5, lines 60-64). Thus, this system indexes files according to pre-specified profiles or topics, and in response to a specific user query, this system searches the index to present a list of articles matching the user's search criterion.

**Boguraev** (U.S. Patent Number 6,212,494) describes a method to extract linguistic information from documentation to create an online help database. A merged file is used to identify key terms that are used for searching.

**A. Claims 36-41, 43-69 are rejected under 35 U.S.C. 103 over Sotomayor in view of Meske.**

**1. General arguments common to all claims**

***a. The final rejection contains errors in reasoning, fails to properly apply the Graham (Graham v. John Deere Co.) factual inquiries, and does not establish a prima facie case of obviousness.***

The appellant believes that the final Office Action rejecting the pending claims was in error, and thus submits this appeal. Specific errors in application of the Graham factual inquiries (i.e., [1] Determining the scope and contents of the prior art; [2] Ascertaining the differences between the prior art and the claims in issue; [3] Resolving the level of ordinary skill in the pertinent art; and [4] Evaluating evidence of secondary considerations) are described in the text of the appeal. The Appellant believes that, to date, the PTO has not appropriately considered the claimed invention as a whole, has not considered the references

as a whole, has not demonstrated that the references suggest the desirability (i.e., motivation to combine) and thus the obviousness of making a combination, and has not viewed the references without the benefit of impermissible hindsight vision afforded by the claimed invention.

To date, no Office Action has specified precisely where in the specifications of Sotomayor or Meske the PTO believes the specific steps of the invention are disclosed, or precisely how the PTO believes these references could be combined to arrive at the current invention. According to the final O.A. (pages 2-4), Sotomayor discloses steps (a) and (c), but not steps (b), (d) and (e). The application is rejected based on the combination of Sotomayor with Meske (Final O.A., paragraph 3), with the implication that Meske discloses steps (b), (d), and (e). In the previous response, the Applicant pointed out that Meske does not disclose steps (b), (d) or (e), an argument that the final O.A. does not refute. Neither the April 16, 2004 O.A. nor the December 3, 2004 (final) O.A. provides any explanation of where in Meske the steps (b), (d) or (e) may be found, instead asserting it would have been obvious to one of ordinary skill in the art to combine Meske with Sotomayor to perform these steps.

Because the specific steps of the invention have not been mapped either to Meske or to Sotomayor, it appears that the PTO has not yet addressed most of the Graham factual inquiries, a prerequisite for determining that the invention would have been obvious to one of ordinary skill in the art.

For subject matter to be considered obvious, it must be possible to show where in the cited references or in the knowledge generally available to one of

ordinary skill in the art that each limitation may be found. In addition, both the current invention and each prior art reference must be considered as a whole, and thus, identification of elements that suggest individual features of the current invention, in the absence of considering how these elements work together to solve a problem (much less the specific sequence of steps claimed), is not sufficient to demonstrate that the invention is obvious.

If the PTO answer brief describes a mapping of the specific steps of the invention to Meske and/or Sotomayor, the appellant respectfully requests that the answer brief include an explanation of the PTO's consideration of the Graham factual inquiries with respect to this specific mapping.

***b. Specific limitations in independent claims 36, 68, and 69 are not described in the prior art relied on in the rejection.***

In addressing this point, the appellant will go through the language of the independent claim 36 (in bold), and will discuss the relevance of the prior art relied on in the rejection with respect to each limitation.

**The claimed invention is a method for using a computer system, in response to a reader's request for display of electronic text, to automatically identify and provide additional reading material related to concepts referred to within said electronic text comprising, in sequence, the steps of:**

Neither Meske nor Sotomayor, nor their combination, performs steps analogous to those of the present invention, much less *in sequence*.

**a) accessing, using the reader's computer, electronic text requested for display by the reader, said electronic text containing at least one text section;**

While both Sotomayor and Meske include steps that permit a user to request that electronic text be displayed, in neither case is this in the context of the steps of the claimed invention.

In Sotomayor, a limited plurality of documents is provided to a computer system, which indexes these documents. In the context of making this index, hyperlinks may be embedded in the text of a document that point to other documents or to other locations in the same document. A document modified in this manner may be requested for display, but in that case, no additional output as is required by step 36(e) is provided.

In Meske, multiple files in markup languages are used in the generation of a filing system and index, organized by profile and topic. However, in Meske, all requests for display of electronic text are made after the index has been constructed, and only occur as a result of a direct query by the user or by directly clicking on a link in the index. Thus, a request for display of electronic text is an end-result of Meske, rather than a starting point. Thus, this violates the requirement that the steps be performed in sequence.

**b) using said at least one text section to automatically formulate, on the reader's computer, a search request related to a concept referred to in said at least one text section;**

The final O.A. concedes that Sotomayor does not disclose step (b) (pages 3-4; “However, Sotomayor does not explicitly disclose b) using said at least one text section to automatically formulate, on the reader’s computer, a search request related to a concept referred to in at least one text section;”). Because Sotomayor does not perform a search (of an index with the limitations of step [c]), it also does not formulate a search request that meets the limitations of step (b).

While the final O.A. asserts (top of page 15) that “. . . it would have been obvious to one of ordinary skill in the art at the time the invention was made to comprehend that clicking on the key-topic index term to read more information about that key-topic is considered as ‘a search request related to a concept referred to in one text section,’” it is clear that “clicking” cannot be construed as an automatic search, as is required by steps b) and c) of the current invention. In addition, any “clicking” must occur after the display of text (otherwise there would be no hyperlink to click), violating the requirement that the steps of the invention be performed in sequence. Moreover, at the time of the “click” in Sotomayor, no index search (as in step (c) of claim 36) is performed—Sotomayor has already incorporated hyperlinks into the document that indicate where the related material is to be found. Clicking on hyperlinks to access a different web page cannot be construed to initiate a search of an index with the limitations of step (c). In particular, hyperlinks point to specific locations, and thus, do not meet the requirements of step (c)(iii), which requires that

at least one term in said index is associated with a plurality of pointers, at least two of said plurality of pointers pointing to different text sections.

In Meske, the user may formulate a search request (e.g., 910 of Meske, Fig. 9), but this is not based on a text section and thus cannot be construed to be related to a concept referred to in said at least one text section. Additionally, any search request in Meske must by definition involve direct user input (as noted in the final O.A., page 4 and page 15), which is specifically proscribed by this limitation.

Clicking on an individual index entry, as may be done on the page of Meske, Fig. 9, clearly does not represent the formulation of a search request (whether automatic or not), not does it result in a search of an index that meets the limitation of step (c) in the current invention. Clicking on one of the table of contents on the page depicted in Meske, Fig. 9 simply presents an additional HTML page (an expanded home page) that links to articles filed under that index entry (i.e., profile), with no search of an index meeting the limitations of step (c) ever taking place, or permits a search entered via a search box to be limited to the individual profile associated with that additional HTML page ("Each of the profile names . . . are selectable as anchors as profiles for the search or for referencing the expanded home page (Fig. 10)," Meske, col. 11, line 2). Thus, Meske does not use said at least one text section to automatically formulate, on the reader's computer, a search request related to a concept referred to in said at least one text section.

**c) responsive to said search request, automatically searching an index, wherein**

**i) said index contains a plurality of terms by which it may be searched;**

**ii) substantially all terms in said index are associated with at least one pointer to a text section; and**

**iii) at least one term in said index is associated with a plurality of pointers, at least two of said plurality of pointers pointing to different text sections;**

The summary page generated by Sotomayor (as described in col. 2 of Sotomayor) could conceivably be construed as an index similar to that described in step (c) of the present invention. However, this summary page is never searched in Sotomayor (see discussion under step [b] for an explanation of why clicking on a hyperlink does not constitute a search of an index with these limitations), and also is generated prior to request for display of electronic text, and thus does not satisfy the limitation that steps (a) through (e) occur in sequence.

Moreover, in order to disclose step (c) of the invention, it would be necessary for the automatic index search of step (c) to be responsive to the results of step (b), an automatic formulation of a search request that was based on step (a). As noted above, such an automatic formulation of a search request does not occur either in Meske or Sotomayor.

Meske also provides an index (e.g., Figs. 9 and 10), but this index is constructed prior to any request for display of electronic text. In Meske,

this index may be searched in response to a specific user input (e.g., 910 of Fig. 9, Meske), but, as noted, this search does not meet the limitation of step (b).

**d) responsive to step (c), automatically identifying additional reading material related to said concept; and**

The final O.A. concedes that Sotomayor does not disclose step d (pages 3-4; "However, Sotomayor does not explicitly disclose . . . d) responsive to step (c), automatically identifying additional reading material related to said concept."). Because Sotomayor does not disclose steps b) or c), it is not possible for Sotomayor to disclose any further steps of the invention, such as step d), which is responsive to step c) and must be performed in sequence.

While it is conceivable that a user of Meske may at one time have windows simultaneously open on a computer desktop that include reading material and an index that includes links to additional related reading material, this identification of additional reading material also does not take place automatically, or inevitably in response to steps (a), (b), and (c) in sequence.

The present invention automatically identifies additional reading material, without needing to index the text requested for display, a substantial improvement over Sotomayor.

**e) automatically displaying on said reader's computer display, an indicator of said additional reading material together with at least one link to a source of said additional reading material, side-by-side with a portion of the electronic text referred to in step (a).**

The final O.A. concedes that Sotomayor does not disclose step e (pages 3-4; "However, Sotomayor does not explicitly disclose . . . e) automatically displaying on said reader's computer display, an indicator of said additional reading material together with at least one link to a source of said additional reading material, side-by-side with a portion of the electronic text referred to in step (a)"). Because Sotomayor does not disclose steps b), c), or d), it is not possible for Sotomayor to disclose any further steps of the invention, such as step e), which is responsive to step d) and must be performed in sequence.

Moreover, neither Sotomayor nor Meske performs a step similar to step (e) at any time (even out of sequence). In Sotomayor, related reading material is indicated by embedding hyperlinks within the original text. In contrast to Sotomayor, side-by-side display with a portion of the text originally requested for display of an indicator of additional reading material, as claimed in the current invention, allows the original text to be read in its original form without any changes. Sotomayor does not describe or contemplate side-by-side display of the results. In Meske, since no electronic text is originally requested in step (a), there is no description of an indicator of additional reading material being presented side-by-side with the electronic text referred to in step (a).

Additional arguments related to the patentability of claim 36, including that it is improper to combine these references (for failure to provide motivation and other reasons) are presented later in this brief.

***c. The references, taken as a whole, do not suggest the subject matter of claims 36, 68 and 69.***

**I. Appellant's invention solves a different problem than the cited references.**

The appellant's invention solves a different problem than the references, and such different problem is recited in the claims (In re Wright, 6 USPQ2d 1959 (1988)). In particular, the present invention provides "additional reading material related to concepts referred to within said electronic text" (Claim 36) a problem clearly not addressed by any of the cited prior art. As already discussed, Sotomayor provides a means of generating a common index to one or more documents, reducing the amount of material that a user must look at in order to find desired information, Meske provides a user with a means of creating an index to and searching articles for relevance to pre-specified topics.

More specifically, Sotomayor does not provide links to reading material additional to that pre-specified by the user, instead limiting its index to the material pre-specified by the user. In contrast, the present invention provides *additional* reading material not previously anticipated by the user to be of interest.

While Meske allows a user who pre-identifies a topic of interest to search an index for articles related to that topic, Meske also does not provide additional related reading material to an individual who is reading a document, as is the case with the current invention.

In order to render the present invention obvious, the cited prior art would need to suggest the desirability of making the invention. Because none of the cited references can be used to solve the problem solved by the present invention, this further militates against use of these references in a determination of obviousness.

***d. Features disclosed in one reference may not properly be combined with features disclosed in another reference to arrive at claims 36, 68, or 69.***

The final O.A. makes clear that individually, none of the prior art references anticipates or renders the present invention obvious.

**I. No motivation to combine Sotomayor with Meske is described in the references or in the knowledge generally available to one of ordinary skill in the art.**

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art. No such suggestion or motivation exists in either reference or in the knowledge generally available to one of ordinary skill in the art at the time the application was filed.

In the rejection of claims 36-41, 43-72 over Sotomayor in view of Meske under 35 U.S.C. 103, the final O.A. argues (pp. 16-17):

As to point B), in response to applicants argument that "Even if combination of the references arrived at the present invention, it is inappropriate to combine the cited references in the manner suggested", the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In this case, since Meske discloses the receipt of a plurality of information organized by profile and topic and parsing information into portions including anchors referencing each of the portions of information to allow hypertext viewing and accessing, which is similar to identifying significant key topics, concepts, and phrases in a document and creating hyperlinks between key topics, thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Meske Jr. and Sotomayor to include using said at least one text section to automatically formulate, on the reader's computer, a search request related to a concept referred to in said at least one text section; automatically identifying additional reading material related to said concept; and automatically displaying on said reader's computer display, an indicator of said additional reading material together with at least one link to a source of said additional reading material, side-by-side with a portion of the electronic text referred. Meske Jr. provides information retrieval, which includes the receipt of a plurality of information, organized by profile and topic in a first markup language, and the parsing of the plurality of information into portions of information in a second markup language, including anchors referencing each of the portions of information to allow hypertext viewing and accessing

The PTO appears to be arguing that an individual with ordinary skill in the art would have been motivated to combine Sotomayor with Meske or with Meske and Boguraev based on his or her own knowledge, since no specific motivation in any reference is cited. However, the PTO “cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies” [In re Lee, 277 F.3d 1338 (Fed. Cir. 2002)]. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination [In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)]. The PTO “must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious” [In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998)].

Moreover, according to MPEP 2143.01 [emphasis added]:

Obviousness can only be established by combining or modifying the teachings of the prior art **to produce the claimed invention** when there is some teaching, suggestion, or motivation **to do so** found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . . In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) . . . In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Ex parte Levengood, 28 USPQ2d 1300, 1302 (Bd. Pat. App. & Inter. 1993) further states that obviousness cannot be established by combining references “without also providing evidence of the motivating force which would impel one

skilled in the art **to do what the patent applicant has done**" (emphasis added).

In order to combine Meske and Sotomayor, it is necessary to find specific motivation to combine them to *produce the claimed invention*. A reference to the fact that these references all describe the creation of indexes does not meet this test. The Applicant respectfully points out that the facts that these inventions are in a similar field and that both involve hyperlinks and indexes does not by themselves provide a "teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art" (final O.A., p. 18), or a motivating force which would impel one skilled in the art to do what the patent applicant has done. For example, no motivation is found in any of these references to automatically search an index to identify additional reading material related to concepts in text requested for display. The fact that both provide hyperlinks as an output would seem to further teach against the use of the output from one invention as the input to the other.

Because the final O.A. does not explicitly state exactly how combination of Meske and Sotomayor is believed by the PTO to arrive at the present invention, it is difficult to examine the prior art for a motivation to make this combination. However, Sotomayor, which provides an index as its primary product, presents no teaching, motivation or suggestion that this index may be further used as input for additional processing to find additional related material, as is apparently contemplated by the PTO in combining Sotomayor with Meske. Likewise, Meske presents no teaching, motivation or suggestion that search terms other than those explicitly chosen by the user could be used in performing its search, or that

Meske could be used in the context of a reading environment. The files received by Meske clearly represent information to be indexed, not search queries. There is thus no basis for concluding that one of ordinary skill in the art would have been motivated to combine these references. And, as previously noted, there is nothing in either reference to suggest that their methods be used in the context of a request for document display, or to provide the output of the current invention.

Even though neither Sotomayor nor Meske demonstrates the individual steps of the present invention, much less their combination, even if they did, the proposed combination of Sotomayor and Meske would be very strained. While the claimed invention requires steps (a)-(e) to occur in sequence, in the combination described in the O.A., step (a) from Sotomayor would need to be combined with step (b) from Meske, which would need to be combined with step (c) from Sotomayor, which would need to be combined with steps (d) and (e) from Meske. Certainly, the O.A. points to no motivation to combine these references in this highly novel way to arrive at independent claims 36, 68 and 69, or dependent claims 37-41 and 43-69.

## **II. Sotomayor and Meske are individually complete.**

Because Sotomayor and Meske each describe complete inventions (see above summaries), each reference further lacks motivation for any combinations with other inventions. Each reference is complete and functional in itself, so there would be no reason to use parts from, or add or substitute parts to, any reference.

The purposes of Sotomayor and Meske are quite different, and these purposes do not overlap with the purpose of the current invention (see Section vii.A.1.c). Sotomayor creates an index to a plurality of articles, and provides that index (or links derived from it) as an end-product to a user, in order to allow a user to find relationships within a pre-determined set of articles, and does not contemplate any searching of its index. Thus, Sotomayor is useless in the context of searching for additional information, because that is not its goal. Meske also creates an index to a plurality of articles, provides that index to a user, and allows the user to search its index, in order to help users find articles that are related to a search term. Meske is useless in the context of reading an individual article, or in the context of finding relationships within a pre-determined set of articles, or in the context of identifying additional related reading material, because those are not its goals.

### **III. Sotomayor teaches away from the present invention and from combination with Meske.**

In Sotomayor, column 5, line 53- column 7, line 10, the use of a web browser to view documents is described. However, in describing access to documents over the internet, Sotomayor states, "One problem with accessing documents over the Internet is that many documents are quite long, and thus can take quite some time to download over the network. This means that viewers are often reluctant to access a document unless they know it will be useful. The present invention facilitates dividing documents into a plurality of pages which

can be efficiently chosen by a viewer and downloaded, one page at a time, and only when the particular page desired is referenced" (col 6, line 65-col. 7, line 6). Thus, the purpose of Sotomayor is to *decrease* the amount of material that a user must look at in order to find desired information.

As noted, Sotomayor provides a means for reducing the amount of material that a user must review in order to find desired information. Meske is a means of indexing files for later retrieval in response to an explicit user search request. Since Sotomayor is involved in decreasing the amount of information presented, it teaches away from combinations with Meske.

One object of the present invention is to provide a reader with additional reading material. Thus, the goals of Sotomayor and the present invention are also mutually exclusive, and thus, it is inappropriate to use Sotomayor in a determination of obviousness of the present invention.

In the final O.A. (top of page 19), this argument is regarded to be the same as the argument in point A (of the O.A.) which is point vii.A.1.d.I in this appeal brief (and point 1 in the previous response), and is thus not separately addressed. In other words, the PTO appears to believe that the applicant's argument that there is no motivation to combine the references is the same as the argument that Sotomayor expressly teaches against combination. The Applicant respectfully disagrees. The fact that Sotomayor teaches away from the present invention militates strongly against combination with Meske.

**IV. There is no reasonable expectation of success in combining Sotomayor with Meske. Reasonable expectation of success is the standard with which obviousness is determined.**

Without an explanation by the PTO of precisely how it believes Sotomayor and Meske could be combined to arrive at the present invention, it is impossible to judge the expectation of success in making that combination, and to support an assertion that the combination is obvious. The previous Office Actions provide no indication of the PTO's basis for concluding that there would be a reasonable expectation of success [*Hodosh v. Block Drug Co., Inc.* 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986)]. As noted above, regardless of how these prior art references might be combined, they do not arrive at the present invention. Moreover, the appellant believes that any combination of these references that would arrive nearer to the present invention would cause them to lose their suitability for their originally intended purpose.

Thus, if in its response, the PTO provides information about a specific combination of material from these references that has not yet been discussed in an office action, the appellant respectfully requests that the PTO provide an analysis of the reasonableness of the expectation of success, as well as the effect of that combination on the function of the individual inventions in the references, Sotomayor and Meske.

**2. Specific limitations in the dependent claims are not described in the prior art relied on in the rejection, and**

**appropriate motivation for combination of references to arrive at dependent claims is not provided.**

**a. CLAIM 39**

Claim 39 is the method of claim 36, wherein the method of formulating said search request comprises selecting certain words from said text section, wherein said index includes words present in other text sections, and wherein said additional reading material contains all words in said search request. The final O.A. rejects claim 39 based on Meske, Figs. 8 and 9, col. 10, lines 41-col. 11, line 5). In the final O.A., specific locations in Sotomayor or Meske where each of these three additional limitations may individually be found are not described. However, Meske Figure 8 is a flowchart describing the display/user search function of Meske, which refers only to the ability of a user to request a search (806), but has no bearing on methods of formulating search requests, descriptions of indexes, or descriptions of additional reading material. Meske, Figure 9 shows a display/search page from Meske, which shows part of the index of Meske, together with a search box. While clicking on an individual index entry, as may be done on the page of Meske, Fig. 9, might represent the user selection of certain words present in a text section, this does not represent the formulation of a search request (whether automatic or not), nor does it result in a search of an index that meets the limitation of step (c) in the current invention. Clicking on one of the table of contents on the page depicted in Meske, Fig. 9 simply presents an additional HTML page that links to articles filed under that index

entry, with no search of an index meeting the limitations of step (c) ever taking place, or permits a search entered via a search box to be limited to an individual profile ("Each of the profile names . . . are selectable as anchors as profiles for the search or for referencing the expanded home page (Fig. 10)," Meske, col. 11, line 2). Meske, Fig. 9, provides no indication of an index that includes words present in other text sections, or that additional reading material contains all words present in a search request. Meske, col. 10, lines 41- col. 11, line 5 provides a written description of Figs. 8 and 9, and provides no further indication of how Figs. 8 or 9 disclose any of the additional limitations found in claim 39, much less all three in combination. Because this claim contains limitations not described in the cited prior art, it should be considered separately and is separately patentable.

**b. CLAIMS 41, 44, 45, 46, 47 and 50**

Claims 41, 44, 45, 46, 47, and 50, which are dependent on Claim 36, also rejected based solely on disclosures within Sotomayor. However, these claims limit 36(b), which the PTO expressly acknowledges is not disclosed by Sotomayor (O.A. pages 3-4). The applicant respectfully submits that various steps within Sotomayor are irrelevant to the automatic formulation of a search request of step (b), which the final O.A. asserts to be disclosed not by Sotomayor, but by Meske. Thus, there is no basis for using a disclosure in Sotomayor in the context of formulating an index search request. Moreover, it would not be appropriate to reject claims 41, 44, 45, 46, 47 or 50 based on the

combination of Sotomayor and Meske, without specific motivation for this precise combination. The appellant reserves the right to argue these claims separately, if the PTO changes the basis for their rejection.

**c. CLAIM 43**

Claim 43 is the method of claim 36, wherein the method of formulating said search request comprises analyzing said text section for citation of references, and wherein said additional reading material cites at least one source cited by said text section. The final O.A. rejects claim 43 based on Meske, col. 11, lines 11-29). Meske, lines 11-29, describe a topic summary page depicted in Meske, Fig. 11, and the results of a user-input FreeWAIS search depicted in Meske, Fig. 12. Nothing either in the associated text or in the Meske, Figs. 11 and 12 is related to methods of formulating search requests, much less the specific method of formulating a search request (the analysis of references cited by a text ) that is described in Claim 43. In addition, Meske does not show additional reading material that cites at least one source cited by a text section used in the formulation of a search request. Taken as a whole, neither Sotomayor nor Meske describes the analysis of references cited by a text as a means of identifying additional reading material, and thus, the two additional limitations of this claim are not disclosed by either reference. Because this claim includes limitations not described in the cited prior art, it should be considered separately and is separately patentable.

**d. CLAIMS 52-54**

Claims 52-54 refer to relationships between concepts, indicating means by which concepts may be considered related to one another, in the context of identifying additional reading material. The final O.A. rejects claims 52 and 54 based on Sotomayor, col. 9, lines 26- col. 10, line 22, and claim 53 based on the abstract of Meske. Sotomayor, col. 9, lines 26-col. 10, line 22 describe horizontal and circular hyperlinks that may be included in a presentation page. A circular hyperlink allows different instances of a key topic to be linked to one another, so that each instance of the key topic includes a single hyperlink that leads to the next instance. A horizontal hyperlink is a hyperlink "from a key-topic entry in one summary page 62 to instances of the same key-topic entry in other summary pages 62." (Sotomayor, col. 9, line 65-66). A description of how hyperlinks between different key-topic instances are presented is completely unrelated to a consideration of the means by which concepts may be considered related to one another, in the context of identifying additional reading material. Meske, abstract, describes the indexing system of Meske, based on profile and topic information contained in files received for indexing. This also is completely unrelated to a consideration of the means by which concepts may be considered related to one another, in the context of identifying additional reading material. Moreover, neither Meske nor Sotomayor provides any discussion of relationships between concepts, and thus, these claims are not disclosed by either reference. Because claims 52-54 include limitations not described in the cited prior art, they should be considered separately and are separately patentable.

In addition, Claims 52, 53, and 54, which are dependent on claim 36, are rejected based solely on disclosures within Sotomayor. However, these claims limit 36(b) and 36(d), referring to concepts, which the PTO expressly acknowledges are not disclosed by Sotomayor (final O.A., pages 3-4). The applicant respectfully submits that various steps within Sotomayor are irrelevant to the concepts in steps (b) or (d), which the PTO asserts to be disclosed not by Sotomayor, but by Meske. Thus, there is no basis for using a disclosure in Sotomayor to describe relationships between concepts in the context either of a search request or the results of a search. Moreover, it would not be appropriate to reject claims 52, 53, or 54 based on the combination of Sotomayor and Meske, without specific motivation for this precise combination. The appellant reserves the right to argue these claims separately, if the PTO changes the basis for their rejection.

**e. CLAIM 58**

Claim 58 is the method of claim 36, wherein said index is accessed via a computer network. In rejecting claim 58, the final O.A. cites Sotomayor, col. 5, line 53-col. 6, line 17. Sotomayor, col. 5, line 53-col. 6, line 17, includes a definition of a "web browser," and further state that a user of Sotomayor "normally uses a web browser to access documents that a database provider may make available on the network" (Sotomayor, col. 6, lines 4-7). While *documents* may be accessed via a computer network, Sotomayor does not disclose accessing of an *index* (meeting the other limitations of the current

invention) via a network. Thus, Sotomayor, col. 5, line 53-col. 6, line 17 does not disclose the additional limitation of claim 58. Because this claim includes a limitation not described in the cited prior art, it should be considered separately and is separately patentable.

**f. CLAIM 59**

Claim 59, which is dependent on claim 36, is rejected based solely on disclosures within Sotomayor. However, this claim limits 36(e), referring to side-by-side display and indicators of additional reading material, which the PTO expressly acknowledges is not disclosed by Sotomayor (O.A. page 4). The applicant respectfully submits that displays or indicators in Sotomayor are irrelevant to the display and indicators of additional reading material in step (e), which the O.A. asserts to be disclosed not by Sotomayor, but by Meske (page 5). Moreover, it would not be appropriate to reject claim 59 based on the combination of Sotomayor and Meske, without specific motivation for this precise combination.

**g. CLAIM 60**

Claim 60, which is dependent on claim 36, is rejected based solely on disclosures within Sotomayor. However, this claim limits 36(e), referring to side-by-side display and indicators of additional reading material, which the PTO expressly acknowledges is not disclosed by Sotomayor (O.A. page 4). The applicant respectfully submits that displays or indicators in Sotomayor are

irrelevant to the display and indicators of additional reading material in step (e), which the O.A. asserts to be disclosed not by Sotomayor, but by Meske. Moreover, it would not be appropriate to reject claim 60 based on the combination of Sotomayor and Meske, without specific motivation for this precise combination.

Moreover, claim 60 describes a distinct indicator of additional reading material not disclosed in either prior art reference. In claim 60, this indicator is an excerpt of said additional reading material. In the final O.A., claim 60 is rejected based on Sotomayor, col. 9, line 26-col. 10, line 22. Sotomayor, col. 9, lines 26-col. 10, line 22 describe horizontal and circular hyperlinks that may be included in a presentation page. A circular hyperlink allows different instances of a key topic to be linked to one another, so that each instance of the key topic includes a single hyperlink that leads to the next instance. A horizontal hyperlink is a hyperlink "from a key-topic entry in one summary page 62 to instances of the same key-topic entry in other summary pages 62." (Sotomayor, col. 9, line 65-66). In Sotomayor, the only indicator of additional reading material that can be seen while viewing a document is a hyperlink embedded within the document. A hyperlink is not an excerpt of said additional reading material. Thus, Sotomayor does not disclose a limitation of claim 60. Thus, because this claim contains a limitation not described in the cited prior art, it should be considered separately and is separately patentable.

#### **h. CLAIM 61**

Claim 61, which is dependent on claim 36, is rejected based solely on disclosures within Sotomayor. However, this claim limits 36(e), referring to side-by-side display and indicators of additional reading material, which the PTO expressly acknowledges is not disclosed by Sotomayor (O.A. page 4). The applicant respectfully submits that displays or indicators in Sotomayor are irrelevant to the display and indicators of additional reading material in step (e), which the O.A. asserts to be disclosed not by Sotomayor, but by Meske. Moreover, it would not be appropriate to reject claim 61 based on the combination of Sotomayor and Meske, without specific motivation for this precise combination.

Moreover, claim 61 describes a distinct indicator of additional reading material that is not described in the cited reference. In claim 61, this indicator is an index term. In the final O.A., claim 61 is rejected based on Sotomayor, col. 9, line 26-col. 10, line 22. Sotomayor, col. 9, lines 26-col. 10, line 22 describe horizontal and circular hyperlinks that may be included in a presentation page. A circular hyperlink allows different instances of a key topic to be linked to one another, so that each instance of the key topic includes a single hyperlink that leads to the next instance. A horizontal hyperlink is a hyperlink "from a key-topic entry in one summary page 62 to instances of the same key-topic entry in other summary pages 62." (Sotomayor, col. 9, line 65-66). In Sotomayor, the only indicator of additional reading material that can be seen while viewing a document is a hyperlink embedded within the document. A hyperlink is neither an excerpt of said additional reading material nor an index term. Thus,

Sotomayor does not disclose a limitation of claim 61. Thus, because this claim contains a limitation not described in the cited prior art, it should be considered separately and is separately patentable.

**i. CLAIMS 62 and 63**

Claims 62 and 63, which are dependent on claim 36, are rejected based solely on disclosures within Sotomayor. However, these claims limit 36(d), referring to relationships between references to concepts, which the PTO expressly acknowledges is not disclosed by Sotomayor (final O.A. page 4). The applicant respectfully submits that concepts in Sotomayor are irrelevant to relationships between references to concepts in step (d), which the PTO asserts to be disclosed not by Sotomayor, but by Meske. Thus, there is no basis for using a disclosure in Sotomayor in the context of describing the results of an index search. Moreover, it would not be appropriate to reject claims 62 or 63 based on the combination of Sotomayor and Meske, without specific motivation for this precise combination. The appellant reserves the right to argue these claims separately, if the PTO changes the basis for their rejection.

**j. CLAIM 66**

Claim 66 is the method of claim 36, wherein additional information resident on the reader's computer influences said search request. The final O.A. rejects claim 66 based on Meske, Abstract and Figs. 9-11. Because neither Meske nor Sotomayor contemplates an automatic search request, based on

concepts in text requested for display, initiated from a reader's computer, it would not be possible for additional information resident on the reader's computer to influence the search request. Claim 36(b) specifies information to be used in formulating a search request, while claim 66 specifies that information additional to that specified in claim 36, which is resident on the reader's computer, is to be used. Meske, Figure 9 shows a display/search page from Meske, which shows part of the index of Meske, together with a search box. While entering a search request into the search box might constitute a search request by a user from a user's computer, additional information resident on the reader's computer does not influence this search request, and in any event, this search request does not meet the other limitations of Claims 36 and 66. Clicking on one of the table of contents on the page depicted in Meske, Fig. 9 simply presents an additional HTML page that links to articles filed under that index entry, with no search of an index meeting the limitations of step (c) ever taking place, or permits a search entered via a search box to be limited to an individual profile ("Each of the profile names . . . are selectable as anchors as profiles for the search or for referencing the expanded home page (Fig. 10)," Meske, col. 11, line 2). Thus, clicking on one of the table of contents on the page depicted in Meske, Fig. 9 does not represent a search, and thus cannot be influenced by additional information resident on the reader's computer in the context of claim 66. Meske, Fig. 10 shows the result of expanding the table of contents depicted in Meske, Fig. 9, but also does not represent a search. Fig. 11 shows a "Topic Summary page accessible by selecting any of the topic anchors shown in Fig. 10" (Meske, col.

11, lines 12-13). There also is no indication that a search has taken place in the generation of Fig. 11. While it is clear that Figs. 9-11 do not disclose a search request that meet the limitations of the independent claims, even if they did, no information additional to that specified in claim 36 that influences a search is disclosed in Meske, Abstract or Figs. 9-11. Neither Meske nor Sotomayor describe any such information. If claim 66 is to be rejected, the applicant requests that the PTO specify the precise additional information described in Meske or Sotomayor, resident on the reader's computer, which is believed to be used in formulating the search request. Because this claim includes a limitation not described in the cited prior art, it should be considered separately and is separately patentable.

**B. Claim 42 is rejected under 35 U.S.C. 103 over  
Sotomayor in view of Meske and Boguraev.**

All arguments related to point A, whether claims 36-41, 43-69 are patentable under 35 U.S.C. 103 over Sotomayor in view of Meske also apply to the question of patentability when the additional reference, Boguraev is considered.

**1. The references, taken as a whole, do not suggest the  
subject matter of claim 42.**

**a. Appellant's invention solves a different problem than the cited references.**

The appellant's invention solves a different problem than the references, and such different problem is recited in the claims (In re Wright, 6 USPQ2d 1959 (1988)). In particular, the present invention provides "additional reading material related to concepts referred to within said electronic text" (Claim 36) a problem clearly not addressed by any of the cited prior art. As already discussed, Sotomayor provides a means of generating a common index to one or more documents, reducing the amount of material that a user must look at in order to find desired information, Meske provides a user with a means of creating an index to and searching articles for relevance to pre-specified topics, and Boguraev solves a problem related to creation of an online help database.

More specifically, Sotomayor does not provide links to reading material additional to that pre-specified by the user, instead limiting its index to the material pre-specified by the user. In contrast, the present invention provides *additional* reading material not previously anticipated by the user to be of interest. While Meske allows a user who pre-identifies a topic of interest to search an index for articles related to that topic, Meske also does not provide additional related reading material to an individual who is reading a document, as is the case with the current invention. Boguraev describes a way to create an index in the context of an online help database, and also does not provide any additional reading material in the context of a reading environment.

In order to render the present invention unpatentable, the cited prior art would need to suggest the desirability of making the invention. Because none of the cited references can be used to solve the problem solved by the present invention, this further militates against use of these references in a determination of obviousness.

## **2. Features disclosed in one reference may not properly be combined with features disclosed in another reference.**

The final O.A. makes clear that individually, none of the prior art references anticipates or renders the present invention obvious.

**a. No motivation to combine Sotomayor with Meske and Boguraev is described in the references or in the knowledge generally available to one of ordinary skill in the art.**

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. No such suggestion or motivation exists in either reference or in the knowledge generally available to one of ordinary skill in the art at the time the application was filed.

In response to the argument made in applicant's response that no motivation is provided to combine Sotomayor, Meske or Boguraev, in its rejection under 35 U.S.C. 103 of claim 42 over Sotomayor in view of Meske and Boguraev, the final O.A. (on page 18) states:

Since Buguraev teaches a method for creating a glossary, index, help database or the like, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the index method of Buguraev into the search system of Sotomayor-Meske to include gathering key terms on the basis of proximity in terms of relative position in the text. By doing so, it would create an online help database useful in providing online assistance to users in performing a task.

The PTO appears to be arguing that an individual with ordinary skill in the art would have been motivated to combine Sotomayor with Meske or with Meske and Boguraev based on his or her own knowledge, since no specific motivation in any reference is cited. However, the PTO "cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies" [In re Lee, 277 F.3d 1338 (Fed. Cir. 2002)]. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination [In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)]. The PTO "must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious" [In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998)].

Moreover, according to MPEP 2143.01 [emphasis added]:

Obviousness can only be established by combining or modifying the teachings of the prior art **to produce the claimed invention** when there is some teaching, suggestion, or motivation **to do so** found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . . In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) . . . In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Ex parte Levengood, 28 USPQ2d 1300, 1302 (Bd. Pat. App. & Inter. 1993)

further states that obviousness cannot be established by combining references “without also providing evidence of the motivating force which would impel one skilled in the art **to do what the patent applicant has done**” (emphasis added). In order to combine Meske, Sotomayor, and/or Boguraev, it is necessary to find specific motivation to combine them to *produce the claimed invention*. A reference to the fact that these references all describe the creation of indexes does not meet this test. The Applicant respectfully points out that the facts that these inventions are in a similar field and that both involve hyperlinks and indexes does not by themselves provide a “teaching, suggestion or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art” (final O.A., p. 18), or a motivating force which would impel one skilled in the art to do what the patent applicant has done. For example, no motivation is found in any of these references to automatically search an index to identify additional reading material related to concepts in text requested for display.

With respect to claim 42, while Boguraev presents a means of creating an index for a help file to be used in an online help database, there is nothing in Boguraev, Sotomayor, or Meske to suggest that this index be used in the context of a request for document display or in the context of the inventions described by Sotomayor or Meske, much less their combination or the present invention. The motivation cited in the final O.A. (page 18) to create an index for a help database, contained in Boguraev, simply refers to the problem that Boguraev solves, and provides no indication of a need or motivation to use this index in additional ways.

Claim 42 is the method of claim 36, wherein the method of formulating said search request comprises analyzing the frequency with which at least one word appears in said text section relative to other words. While Boguraev analyzes text based on frequency with which words appear relative to one another, Boguraev does not use this information to formulate a search request. Plausible motivation for combination of Sotomayor, Meske and Boguraev is not provided. Thus, this claim should be considered separately from the other claims on appeal and is separately patentable.

**b. Sotomayor, Meske, and Boguraev are individually complete.**

Because Sotomayor, Meske, and Boguraev each describe complete inventions (see above summaries), each reference further lacks motivation for any combinations with other inventions. Each reference is complete and

functional in itself, so there would be no reason to use parts from, or add or substitute parts to, any reference.

**c. There is no reasonable expectation of success in combining Sotomayor with Meske or Boguraev. Reasonable expectation of success is the standard with which obviousness is determined.**

Without an explanation by the PTO of precisely how it believes Sotomayor and Meske could be combined to arrive at the present invention, it is impossible to judge the expectation of success in making that combination, and to support an assertion that the combination is obvious. The previous Office Actions provide no indication of the PTO's basis for concluding that there would be a reasonable expectation of success [*Hodosh v. Block Drug Co., Inc.* 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986)]. As noted above, regardless of how these prior art references might be combined, they do not arrive at the present invention. Moreover, the appellant believes that any combination of these references that would arrive nearer to the present invention would cause them to lose their suitability for their originally intended purpose.

Thus, if in its response, the PTO provides information about a specific combination of material from these references that has not yet been discussed in an office action, the appellant respectfully requests that the PTO provides an analysis of the reasonableness of the expectation of success, as well as the

effect of that combination on the function of the individual inventions in the references, Sotomayor, Meske, and/or Boguraev.

## **viii. Claims Appendix**

### **LISTING OF CLAIMS**

36. A method for using a computer system, in response to a reader's request for display of electronic text, to automatically identify and provide additional reading material related to concepts referred to within said electronic text comprising, in sequence, the steps of:

- a) accessing, using the reader's computer, electronic text requested for display by the reader, said electronic text containing at least one text section;
- b) using said at least one text section to automatically formulate, on the reader's computer, a search request related to a concept referred to in said at least one text section;
- c) responsive to said search request, automatically searching an index, wherein
  - i) said index contains a plurality of terms by which it may be searched;
  - ii) substantially all terms in said index are associated with at least one pointer to a text section; and
  - iii) at least one term in said index is associated with a plurality of pointers, at least two of said plurality of pointers pointing to different text sections;
- d) responsive to step (c), automatically identifying additional reading material related to said concept; and
- e) automatically displaying on said reader's computer display, an indicator of said additional reading material together with at least one link to a source of said additional reading material, side-by-side with a portion of the electronic text referred to in step (a).

37. The method of claim 36, wherein said additional reading material of step d is accessible over a network.

38. The method of claim 37, wherein said network is the internet.
39. The method of claim 36, wherein the method of formulating said search request comprises selecting certain words from said text section, wherein said index includes words present in other text sections, and wherein said additional reading material contains all words in said search request.
40. The method of claim 36, wherein the method of formulating said search request comprises analyzing said text section for the presence of combinations of certain words in a specific order and within a specified proximity of one another, wherein said index includes words from other text sections, and wherein said additional reading material contains the same combinations of certain words in said specific order and within said specified proximity of one another.
41. The method of claim 36, wherein the method of formulating said search request comprises analyzing said text section for patterns of word usage that are recognized by the computer system to relate to a concept.
42. The method of claim 36, wherein the method of formulating said search request comprises analyzing the frequency with which at least one word appears in said text section relative to other words.
43. The method of claim 36, wherein the method of formulating said search request comprises analyzing said text section for citation of references, and wherein said additional reading material cites at least one source cited by said text section.
44. The method of claim 36, wherein the method of formulating said search request comprises analyzing said text section for embedded commands.
45. The method of claim 36, wherein the method of formulating said search request comprises statistical analysis of word usage within said text section.
46. The method of claim 36, wherein the method of formulating said search request comprises identifying an index entry referring to said text section.
47. The method of claim 36, wherein said search request is contained in a list of potential search terms.
48. The method of claim 36, wherein said search request comprises words within said text section of step (a).
49. The method of claim 36, wherein said search request comprises a plurality of words.

50. The method of claim 36, wherein said search request comprises a synonym of at least one word in said text section.
51. The method of claim 36, wherein said additional reading material is related to said section of text by discussion of identical concepts.
52. The method of claim 36, wherein said additional reading material is related to said section of text by discussion of concepts that are related to one another.
53. The method of claim 52, wherein said concepts are considered related to one another when both are related to a third concept.
54. The method of claim 52, wherein said concepts are considered related to one another when one is included within the other.
55. The method of claim 36, wherein said index is an author's index to said requested text.
56. The method of claim 36, wherein said index is generated automatically by a computer system.
57. The method of claim 36, wherein said index is a search engine.
58. The method of claim 36, wherein said index is accessed via a computer network.
59. The method of claim 36, wherein said display occurs in a browser window.
60. The method of claim 36, wherein said indicator of additional reading material is an excerpt of said additional reading material.
61. The method of claim 36, wherein the indicator of additional reading material is an index term.
62. The method of claim 52, wherein the computer system obtains input from the reader regarding the types of relationships between references to concepts to provide information about in step (d).
63. The method of claim 62, wherein the computer system obtains input from the reader regarding the strength of relationships between related concepts to provide information about.
64. The method of claim 36, wherein said indicator of additional reading material is displayed on an outline of at least one text.

65. The method of claim 36, wherein said index to be searched may be selected by the reader.

66. The method of claim 36, wherein additional information resident on the reader's computer influences said search request.

67. The method of claim 36, wherein said text requested by the reader is obtained via a computer network.

68. A computer system that, in response to a reader's request for display of electronic text, automatically identifies and provides additional reading material related to concepts referred to within said electronic text comprising:

- a) means for accessing electronic text requested for display by the reader, said electronic text containing at least one text section;

- b) means for using said at least one text section to automatically formulate a search request related to a concept referred to in said at least one text section;

- c) means for, responsive to said search request, automatically searching an index, wherein

- i) said index contains a plurality of terms by which it may be searched;

- ii) substantially all terms in said index are associated with at least one pointer to a text section; and

- iii) at least one term in said index is associated with a plurality of pointers, at least two of said plurality of pointers pointing to different text sections;

- d) means for, responsive to step (c), automatically identifying additional reading material related to said concept;

- e) means for automatically displaying on said reader's computer display, an indicator of said additional reading material together with at least one link to a source of said additional reading material, side-by-side with a portion of the electronic text referred to in step (a); and

- f) a display device controlled by a computer

69. A computer memory storage device encoded with a computer program that, in response to a reader's request for display of electronic text, automatically

identifies and provides additional reading material related to concepts referred to within said electronic text comprising:

a) means for accessing electronic text requested for display by the reader, said electronic text containing at least one text section;

b) means for using said at least one text section to automatically formulate a search request related to a concept referred to in said at least one text section;

c) means for, responsive to said search request, automatically searching an index, wherein

i) said index contains a plurality of terms by which it may be searched;

ii) substantially all terms in said index are associated with at least one pointer to a text section; and

iii) at least one term in said index is associated with a plurality of pointers, at least two of said plurality of pointers pointing to different text sections;

d) means for, responsive to step (c), automatically identifying additional reading material related to said concept; and

e) means for automatically displaying on said reader's computer display, an indicator of said additional reading material together with at least one link to a source of said additional reading material, side-by-side with a portion of the electronic text referred to in step (a).

### **ix. Evidence Appendix**

Evidence supporting the arguments in this brief are found in the USPTO's final Office Action, and the references Sotomayor and Meske, that were cited in said Office Action.

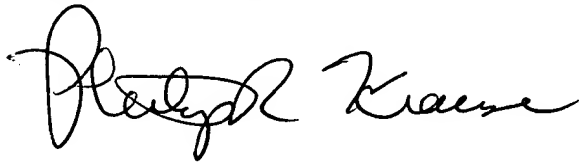
### **x. Related Proceedings Appendix**

There are no related proceedings known to the appellant.

### **Conclusion**

For the foregoing reasons, the appellant submits that the rejections of the claims should be reversed.

Very Respectfully,

A handwritten signature in black ink, appearing to read "Philip R Krause", written in a cursive style.

Philip R Krause

Appellant Pro Se

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